

Suspect Norovirus Outbreaks Hit Schools Hard Across Indiana

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Several schools have reported outbreaks of apparent viral gastroenteritis since the start of school this year. Outbreaks have been identified in several counties, including Fulton, Wells, Orange, and Marion. The ISDH received notification of the first outbreak on August 20, with other outbreaks reported since then.

Symptoms reported with these outbreaks include a sudden onset of nausea, vomiting, and diarrhea. In most of the outbreaks, a few cases reported symptom onset prior to the start of school. After school starts, a surge in cases is observed, presumably due to closer contact of students and school staff members. Therefore, school populations are serving as “sentinels” for transmission within the larger community, and the illness is reported.

Local health departments in the affected counties and the ISDH are actively investigating these outbreaks. Although specimen results are pending from ill cases, the illness closely resembles viral gastroenteritis. The most common agent of viral gastroenteritis is Norovirus. Viral gastroenteritis is transmitted through the fecal-oral route, either via contaminated food or beverages or through person-to-person contact. Since no ill food workers or suspected food vehicles have been identified to date, the illness is most likely being transmitted person-to-person. Most cases have reported contact with another ill person prior to onset. In addition, many family members and other close contacts of cases have also become ill. Agents of viral gastroenteritis are highly infectious and environmentally stable.

Symptoms of viral gastroenteritis include a sudden onset of nausea, vomiting, diarrhea, headache, body aches, chills, but little to no fever. Symptoms usually begin within 12-48 hours after exposure. The illness usually resolves on its own within 1-2 days without complications. Dehydration may result after prolonged vomiting and diarrhea, particularly in young children, the elderly, and those with weakened immune systems. **The best method to prevent transmission is to always wash hands: after using the restroom, before eating, and before preparing food. People infected can shed virus in stool up to 2 weeks after symptoms stop, so continued, proper hand washing is essential.**

Those who are ill or become ill at school, including students and staff members, should be excluded from school until symptoms stop.

What Schools Can Do:

1. School nurses or other school officials should immediately report increased cases of gastroenteritis or absenteeism to their local health departments (LHD).
2. Exclude ill students and staff members from school immediately.

3. School officials can consider distributing a “dear parent” letter describing the illness and prevention measures. The ISDH has sample letters available. It may be helpful to include the ISDH “Quick Facts” sheets on viral gastroenteritis and hand washing. Those may be found on the ISDH web site at www.statehealth.in.gov, select the health information link, and select “Quick Facts”. The LHD can provide valuable guidance for writing these letters.
4. Disinfect all common surfaces, including but not limited to, countertops, chairs, desks, restrooms, floors, handrails, elevator buttons, and doorknobs with a 10% solution of household bleach.
5. Ensure that restrooms are fully supplied with soap, disposable towels and/or functioning hand dryers. Common towels should not be used.
6. Stress the importance of hand washing and exclusion of ill students from school to students and parents.

What Local Health Departments Can Do:

1. Report suspected outbreaks immediately to your ISDH field epidemiologist or the ISDH central office at 317-233-7125.
2. Assist school officials with guidance for “dear parent” letters, exclusion of ill students and staff members from school, and environmental disinfection.
3. Although these outbreaks are currently displaying the same pattern of occurrence and transmission, it is still important to rule out foodborne illness and other causes of diarrheal illness. Therefore, the ISDH recommends stool testing of at least three individuals exhibiting diarrhea. Please use the 7A collection containers and complete both the Enteric submission form (found in the container) and the Virology request form (available from ISDH). **Specimen vials inside the containers must be labeled with patient name and collection date.** These must be stored and transported cold to the ISDH Laboratories. Please include the local health department address in the submitter address block on the forms.
4. The ISDH recommends interviewing 20-30 ill cases (students, school staff, or household contacts) to determine if the illness clinically resembles viral gastroenteritis. Questionnaires are available from the ISDH.
5. Contact your ISDH field epidemiologist or the ISDH central office for any assistance or guidance.

What the ISDH Can Do:

1. Provide assistance or guidance regarding clinical illness information, outbreak investigation, exclusion, and environmental disinfection.

2. Supply 7A specimen collection containers, forms, and transportation guidance to local health departments. Specimens will be tested at the ISDH Laboratories for Norovirus and common agents of bacterial diarrheal illnesses.
3. Provide “dear parent” sample letters and case interview questionnaires to local health departments.
4. Provide guidance for media issues.

The ISDH commends the school staff members and local health departments for their cooperation and diligent efforts to report and investigate these outbreaks and implement control measures.
